

Notice of Allowability

Application No.

10/501,886

Examiner

Ninh H. Nguyen

Applicant(s)

KAJIWARA ET AL.

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment dated 13 March 2007.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

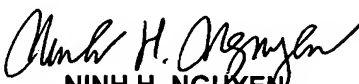
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date herewith.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


NINH H. NGUYEN
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael J. Caridi, Reg. No. 56,171 on 30 March 2007.

The application has been amended as follows:

In the Claims

Claims 1 and 3 have been re-written as follows:

1. (Currently amended) An impeller having a disk-like main plate, a blade joined to said main plate, and a side plate having a suction port, characterized in that:

a boss hole is formed in a central portion of said main plate for attaching a boss which engages with a pump shaft to said boss hole,

wherein a the step portion is formed around the boss hole, which is formed in said main plate by drawing, said step portion constituting means for forming a gap so that when a plurality of main plates are piled on one another, said gap is formed by only contacting said step portions of adjacent main plates to each other to thereby prevent said adjacent main plates from being adhered to each other,

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wherein the step portion comprises a sharp angle portion on a surface of the main plate and a slant portion on an opposite surface of the main plate, and wherein the slant portion having a smaller angle than that of the sharp angle portion.

3. (Currently amended): An impeller having a disk-like main plate, a blade joined to said main plate, and a side plate having a suction port, characterized in that:

a boss hole is formed in a central portion of said main plate for attaching a boss which engages with a pump shaft to said boss hole,

wherein a step portion is formed around the boss hole, which is formed in said main plate by drawing, said step portion constituting means for forming a gap so that when a plurality of main plates are piled on one another, said gap is formed by only contacting said step portions of adjacent main plates to each other to thereby prevent said adjacent main plates from being adhered to each other;

wherein the step portion comprises a sharp angle portion on a surface of the main plate and a slant portion on an opposite surface of the main plate, wherein the slant portion having a smaller angle than that of the sharp angle portion; and

a radially inner end portion of said blade which is joined to said main plate is rounded near a portion at which said blade is joined to said main plate.

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In the Specification

On page 4, line 15, the following has been added to the end of the second paragraph:

--As shown in Fig. 3, the step portion 14 comprises a sharp angle portion on a surface of the main plate and a slant portion on an opposite surface of the main plate, wherein the slant portion having a smaller angle than that of the sharp angle portion.--

Reason for Changes

The above changes were made to put the application in allowable condition.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is (571) 273-8300.

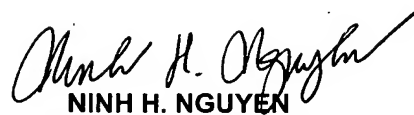
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, please go to <http://pair-direct.uspto.gov> or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).


NINH H. NGUYEN
PRIMARY EXAMINER

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April 12, 2007